Rao Muhammad Touqeer

Address: Basti Mehmudabad rungpur House # 49 Post Office Samma Satta, 63100 Bahawalpur, Pakistan

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Phone Number: +923017734249

Teaching Experience

Visiting lecturer in Mathematics   February 2022 – Present
University of Education Lahore(Multan Campus).   *Multan, Pakistan*
Taught Courses:
1. Abstract Algebra 2. Linear Algebra 3. Rings and Fields 4. Complex Analysis
5. Calculus 6. Analytic Number Theory 7. Set Topology 8. Functional Analysis

Research Experience

Co-supervising   February 2024 – Present
University of Education Lahore(Multan Campus).   *Multan, Pakistan*
Co-supervising two students: one in coding theory and the other in cryptography, guiding their research methodologies, problem solving approaches and their academics writing of thesis.

Education

Quaid-i-Azam University lalamabad, Pakistan.   September 2019 - December 2021
MPhil Pure Mathematics/Coding Theory and Cryptography
COMSATS University Islamabad, Sahiwal Pakistan   February 2015 - March 2017
MSc Mathematics/Post-Quantum Cryptography

Research Conferences

Attended

02/03/2022, Modern Trends in Mathematics, Fatimah Jinnah University, Islamabad

10/08/2022, Modern applications of Algebra and Number Theory, ASSMS, Lahore

05/10/2022, Simulation with MATLAB, PIEAS University, Islamabad

Presented

03/05/2022, Modern Applications of Cryptography, PIEAS University Islamabad

05/11/2019, Modular Arithmetic for Modern Ciphers, Quaid-i-Azam University, Islamabad

12/12/2019, Applications of Applied Algebra , Institute of Space Technology, Islamabad

01/01/2020, DES and DES Structure and Cryptanalysis, Quaid-i-Azam University, Islamabad

Research Internships

CIMPA Research School on Pure and Applied Mathematics.

26/02/2024, Algebra And Algebraic Geometry For Applications. LUMS University, Pakistan

10/06/2024, Bridges Between Algebra and Combinatorics. Colombia (Online)

09/08/2024, Post-Quantum Algebraic Cryptography, Institute of Henry Poincare, IHP France

National Programme On Technology Enhanced Learning (NPTEL) Onlines Courses

1. Elementary Number Theory. By Prof. S.A. Katre, IIT Madras, India

2. Computational Commutative Algebra. By Prof Manooj Kumini, CMI Chennai, India

3. Introduction to Galois Theory. By Prof Dilip Patil, IIT Bombay, India

4. Quantum Algorithms and Cryptography. By Prof. Shewta Agrwal, IIT Madras, India

5. Error Control Coding. By Prof. Andrew Thangaraj IIT Madras, India

6. Introduction To Quantum Computing and Quantum Algorithms and Qiskit, By Prof. (Prabha, Anupma, Ragunathan) IIT Madras, IBM Research and IBM Systems, India

Specialized Skills

Programming Languages: C++, Python, MATLAB.

International Mathematics Memberships

1. **American Mathematical Society (AMS)**
2. **International Society for Mathematical Sciences (ISMS)**
3. **International Association for Cryptologic Research (IACR)**
4. **Pakistan Mathematical Society (PaKMS)**

Research Interests

Research Interests:
Algebra, Number Theory, Coding Theory and Cryptography applications

Awards & Honors

Best Instructor Award Shield
Pakistan National Youth Training institute (PNY)   *Multan Pakistan*
Best Lecturer Award Shield
Punjab Group Of Colleges (PGC)   *Lodhran, Pakistan*

Languages Skills

Urdu: Native
English: Advance

RECOMMENDATIONS

MPhil Supervisor and Chairman:
Name: Prof. Dr. Tariq Shah
Phone number: (+92) 3335072554
Email: stariqshah@qau.edu.pk

Principal and Chairperson:
Name: Prof. Dr. M.Asad Meraj
Phone number: (+92) 3249825404
Email: asad@ue.edu.pk